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THE RELATION OF DISEASES OF THE FEMALE  
GENERATIVE ORGANS TO NERVOUS  
AND MENTAL AFFECTIONS

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[and]

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THE GRAVER NERVE DISTURBANCES DUE TO  
ORGANIC CHANGES IN THE  
GENITAL ORGANS

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American Association of Obstetricians and Gynecologists

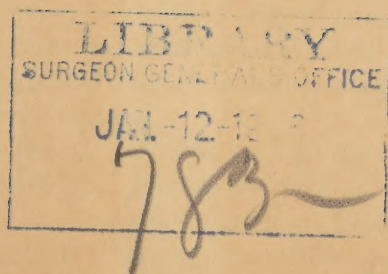
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# THE RELATION OF DISEASES OF THE FEMALE GENERATIVE ORGANS TO NERVOUS AND MEN- TAL AFFECTIONS.\*

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National Delegate to the International Congress of Gynecology, at Amsterdam, 1899.

I HAVE been much interested of late in various papers written by men of reputation in the department of neurology, bearing upon the subject of the relation of diseases of the female pelvic organs, to nervous and mental affections.

I attended the last meeting of the American Medical Association held at Denver, almost expressly to be present at the joint session of the sections of neurology and gynecology, for the discussion of this subject, which had been arranged for the year previous.

The several distinguished neurologists, appointed to discuss their side of the subject, presented in every instance, able papers, worthy of more than ordinary consideration, because of their united negation of any relation between the nervous system and diseases of the female pelvic organs.

It is much to be regretted that two, of the three gentlemen appointed to present the gynecologic side of the discussion, were not present, and therefore this side of the question was but imperfectly presented. Having been called upon unexpectedly and at the last moment, to take the place of my distin-

\*Read before the American Association of Obstetricians and Gynecologists, Pittsburg, Pa., September 20-22, 1898.



guished colleague, Dr. L. S. McMurtry in this discussion, and having neither the time or sources of information at my command, with which to present an argument that would properly set forth and substantiate my views, I have taken this occasion to present them more in detail and support them by statistical information.

My consideration of the subject, will be limited to the great neuroses of neurasthenia and hysteria, and insanity, and in order that I may not be misunderstood as to the premises from which I start, I will say that I am totally opposed to any operative procedure, except where pathologic conditions are demonstrable. I have no confidence in operations upon healthy organs, for the cure of any neurotic condition, and believe that such are now generally condemned by the profession.

One of the distinguished neurologists at Denver stated that, "The disorders of her pelvic organs have no more to do with her nervous and mental diseases, than lesions elsewhere in her body; indeed, they have less to do with her psychoses and neuroses than most of her other organs."

Another in this same discussion declared that, "All idea of curing neurasthenia or hysteria by operations upon the pelvic organs, must be absolutely abandoned." And in another place he says, "The insanities are not due to local organic disease. Facts are rapidly accumulating to show that the insanities are due to disease of the neuron, structural and functional, the result of various poisons circulating in the blood. Surely it would be just as sensible to claim a cure of insanity, by trimming the toe-nails, as to claim a cure by pelvic operations." And this, by one of the leading neurologists in this country.

I look upon the position taken by some of our colleagues in neurology, that there is no relation of cause and effect between the various neuroses and psychoses, and diseases of the female pelvic organs, as being as extreme and condemnatory as would be the advocacy of the removal of normal organs in the female pelvis, for the cure of nervous diseases, by some ill-advised persons calling themselves gynecologists.

In operating upon diseased conditions in the pelvis, we do not expect to remove the symptoms of the neuroses, but only those symptoms properly belonging to the pelvic disease itself.

Strange and disappointing as it may be to some of our critics, when these pathologic pelvic conditions are removed or corrected, the nervous system relieved from the source of unceasing irritation, gradually returns to its normal poise, and the patient is cured of her neuroses as well as her pelvic disease.

Our neurologists are proclaiming the same doctrine as did Professor Clifford Allbut in his Gulstonian lectures before the Royal College of Physicians in 1892 (but from which he has since recanted almost in-toto), that there are a number of uterine and pelvic disorders, which are but the manifestation of neuroses. In point of fact, the statement needs to be made exactly the reverse, and so frequently is this met with in gynecologic practice, that the gynecologist has become expert in their diagnosis and treatment.

We all have passed through that period in which our touch has been educated to diagnose morbid conditions of the uterus and adnexa, and all know how delicate and difficult, and sometimes impossible the task is under varying conditions. If difficult to those who give their attention to it exclusively, how much more must it be to those who attempt it only occasionally.

The fact of the matter is, that disease of the pelvic organs and affections of the nervous system, are so frequently concomitant and interdependent, that the neurologist is, by far, less likely to give due and proper consideration to the pelvic troubles than the gynecologist to the neuroses,—because of his lack of practice and natural repugnance to propose and pursue vaginal examinations upon the patients that come to him, whereas in the routine questions that form the history taken of every important case by the gynecologist, the neurotic and psychotic conditions present themselves and are given the consideration which their importance demands.

The study of, and acquaintance with, the great neuroses and psychoses is forced upon the gynecologist by the very nature of his study and treatment, whereas the patient going to the neurologist, does not expect, and in most cases would refuse a pelvic examination at his hands.

In point of fact, the neurologist sees but a small percentage of the operative cases, and their views on the whole subject, are prejudiced by this exceptional class as well as by their imperfect



and limited knowledge of the special department of the diseases of women.

I will venture to say, there is not a prominent gynecologist, but has seen numbers of women having diseased pelvic organs, and with pronounced nervous symptoms, who have come to him after having had the rest cure and various other treatments, and were restored to health by the cure of the pelvic lesions by operation. The position taken by many neurologists toward operations upon the sexual organs of women, is unfortunate for this class of cases, and it is well to remind them, that remarks, prejudicial to operative treatment, act as suggestion upon neurasthenic and hysterical patients, just as surely and detrimentally as does the unwarranted pelvic examination at the hands of the gynecologist.

Dr. Bedford Fenwick has gone over a large number of cases in his Woman's Hospital, in London, case-books with a view of ascertaining the number of cases which complained of symptoms directly associated with their pelvic troubles. Taken as they came, only ten per cent complained of symptoms directly connected with the pelvic organs; the remainder, giving histories of troubles having no apparent connection therewith, and descriptions of which he gives in detail.\*

Nor does it necessarily follow that the pelvic disease shall be gross in character, in order to give rise to local symptoms. As I pointed out in a paper that I presented before this distinguished society at its last meeting, micro-pathological change in the ovary frequently gives rise to more excruciating pain and far-reaching reflex symptoms, than do those of a grosser character which are more easily diagnosed.† McNaughton Jones says,‡ "One of the most desperate cases of dysmenorrhœa I have ever witnessed through the nerve storms at the menstrual period, was completely cured by removal of the ovaries, which presented no evidence of disease further than slight sclerosis with the sago-grain degeneration familiar to us." This condition has now been denominated, sclero-micro-cystic degeneration.

The limits of this paper will not admit of my analyzing in

\*British Medical Journal, Vol. IX, No. 34, p. 153.

†Transactions of the American Association of Obstetricians and Gynecologists, Vol. X, p. 233.

‡British Gynecological Journal, August, 1893, page 137.



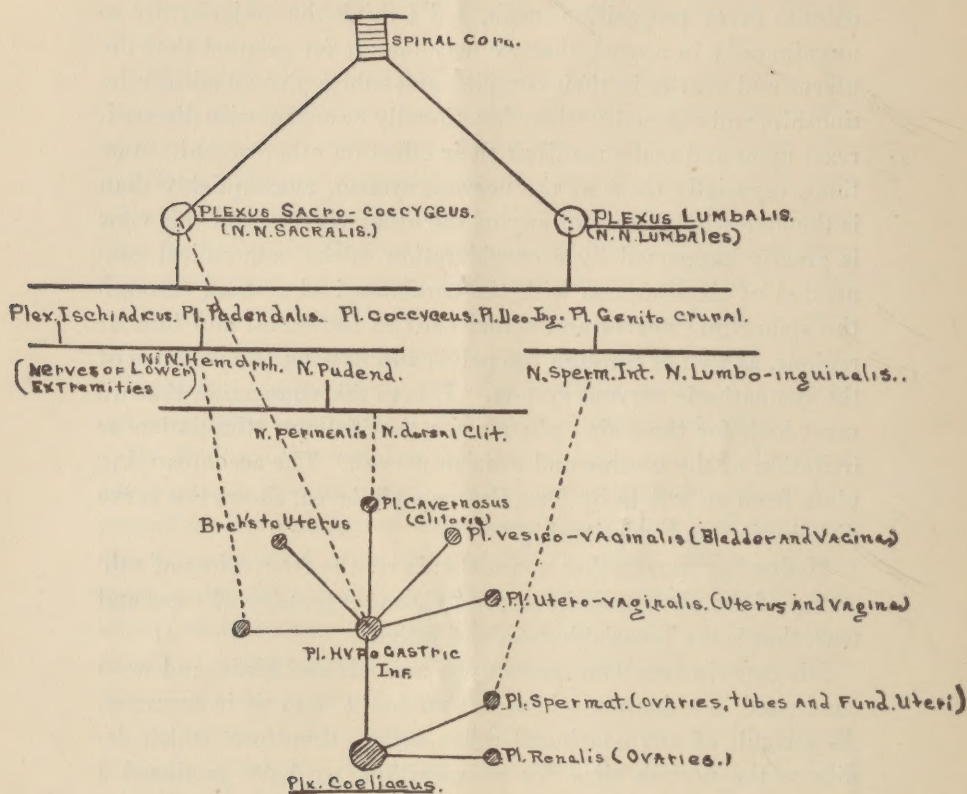
extenso every proposition made, and I think the majority are so unanimously in accord, that we may take it for granted that the uterus and ovaries in their complex and subtle physiological relationship, and especially when functionally or organically diseased, react upon and make manifest their effect on other organic functions, especially those of the nervous system, more quickly than is the case with disease of any of the other viscera, and this view is greatly supported by a consideration of the anatomical connection of those organs with the cerebro-spinal system, through the splanchnic nerves and spinal cord in the sacral and lumbar regions, as well as through the pelvic and hypogastric plexuses of the sympathetic nervous system. It is to this connection that we must look for the reflex phenomena that follows stimulation or irritation of the uterine and ovarian nerves. The accompanying plate from an article by Drs. Pearce and Beyea, shows the nerve distribution and relationship.\*

Hodge has proven that neurasthenia results from a loss of substance of the nucleus and cell protoplasm, expressive of wear and tear, that is the invariable result of fatigue.

His experiments were made upon animals and birds, and were conducted in a manner which left no doubt as to their accuracy. As a result of any continued reflex action, therefore, which denies to the neuron time for recuperation, we have produced a pathological condition which is seen in the shrinkage of the nucleus and cell substance, which robs the neuron of its functional ability to transmit the normal nerve influence, and gives rise to the chronic fatigue symptoms of which all true neurasthenics complain; and these symptoms pertain to every part of the system—muscular, the special senses, mental, digestive, and derangement of the nutritive interchange.

The neurasthenic unit is a nerve force quantity. It may be a quantity in excess of the normal, or a quantity less than the normal. It may be nerve force out of balance, or nerve force delicately poised. It may be perverted nerve force. It may be nerve force overpowered by inhibition, or it may be controlled by a condition corresponding to a short circuited electric cell, in which all inhibitory power is lost. The protean manifestations of the neurasthenic state are accounted for, and only accounted for by

\*Annals of Gynecology and Pediatrics, Vol. XI, No. 12, page 865.



The dotted lines indicate the combinations.

a condition of varying values. The neuron's molecular relation to the electric current has not been determined, neither has the nucleus and cell protoplasmic relation to the nerve force current been made out; but the neurasthenic condition doubtless travels in the direction of least resistance. Nervous demand has the power of attracting, in some way, nervous supply, but instead of the nerve centres supplying the demand with normal nerve force in a regular way, the centres supply a pathologic nerve force, or what amounts to the same thing, nerve force at irregular intervals.

With the conceded ground that the pathological condition is brought about by the influence of a too unrelaxed subjection of the nerve cell and protoplasm to functional activity, let the source of this activity be what it may, then the source of this irritation



must be corrected if the patient is to receive any permanent benefit.

If neurasthenia is the result of a change in the nerve cell, due to too great exercise of its functional activity, then disease of the pelvic organs furnishes the most frequent source of this irritation, and as the primal cause must be corrected if a cure is to be effected.

The rest-cure, tonics, and liberal diet may improve the condition of the neurasthenic suffering from pelvic disorder, but her condition becomes as bad and often worse than before when she is removed from the favorable environment and is again subject to the care and labor of daily life.

During childhood, the body rapidly grows and develops in all its parts, except the generative organs; these remain comparatively quiescent until the age of puberty, when they take on extraordinary activity and seem to strive for development at the expense of all the other forces. Unfortunately, at about this age, our girls become most interested and ambitious in their studies, and it is astonishing to see the amount of work some of them will strive to do.

The hours of continual application, which the less mentally capable among them have to undergo, and the truly heroic efforts they put forth trying to keep pace with those of brighter intellect, are ruinous to physical development.

These are the girls, who, if they do not break down in the effort, accomplish their mental tasks at the expense of the pelvic viscera, and early come into the hands of the physician with infantile organs, neurasthenia, and others of the great neuroses.

No thoughtful mind can reflect upon the nervous relations and requirements of this period of life, and escape the conclusion that the proper development of the organs of reproduction demands full nutrition and plenty of oxygen, best secured by freedom from indoor confinement and taxation of the mind; failure to recognize this, leads in many cases to pubescent disorders, and fastens a neurosis upon the victim.

The poisons of fatigue are generated more rapidly in the girl of eleven to thirteen, than at any other period, as has been shown by Wedensky, the Russian, and Maggiori and Mosso, the Italian chemists. The blood supply is no greater at the pubescent age

than any other, and by some is claimed to be less, yet the demands upon its elements is greater than at any other time of life.

Brain fag in school children at this age, is of common occurrence, and nature is a strict accountant. If she supplies more to one part than she has made provision for, she deducts from something else.\*

In the errors of adolescence, defective growth and consequent disorders of the normal functions of the generative organs, lies the cause of the neuroses, and even insanity in many cases. Dr. Gill Wylie says that imperfect development may result in a hyperesthetic condition of the endometrium, prevent normal atrophic changes, and cause serious reflex nervous disturbances.†

There is no time in a woman's life, from puberty to old age, that we do not have presented before us, the intimate physiological relation between her generative organs, and several nervous systems, and through these, to every organ and part of her body. The acne of adolescence is an example of the influence of these organs upon the skin. The reflex connection between the mammary gland and these organs, during the menstrual period, can only be accounted for through the nervous system. By what other influence are we to account for the malaise, slight nausea, headache, disturbed vision, flashes of heat, constipation or diarrhoea, localized areas of hyperesthesia, and mild forms of hallucination, all of which are sometimes, and in some patients, constantly present during the catamenia; making their appearance with its onset, subsiding and disappearing with its close.

The intimate connection of the cortex with the ovary, is shown by the fact that cortical disease arrests menstruation. These physiological relations, we are intimately acquainted with, and if present, physiologically, I wonder who is going to convince us, that in the presence of pathological changes, the influence of these organs upon the nervous system will not be more pronounced; as for example, the occurrence of various shades of optic neuritis and retinal irritation in connection with suppression or irregularity of the catamenia, slight epileptiform seizure of the facial muscles, laryngeal neuralgia, functional aphonia, tinnitus aurium and vertigo.

\*Annals of Gynecology and Pediatrics, June, 1898, p. 666.

†American Gynecological Transactions, 1891.



As a consequence of menstrual irregularities, we find painful irritation of the dorsal and lumbar spinal zones, functional irregularity of the cardiac rhythm, gastralgia, slight icteric attacks, irritation of the bladder with frequent micturition, varieties of headaches, and severe hemicrania. All these symptoms can only be accounted for as reflex vaso-dilating or vaso-contracting phenomena, the result of irritation in the uterus or ovaries, arising from imperfectly performed physiological functions. We have all seen the acute disturbance of the menstrual function as a result of mental or physical shock, cold, heat, or great bodily fatigue. The spasmodic form of dysmenorrhœa, which at one time largely occupied the attention of the profession, and which gave rise to as many forms of treatment, as there were students of its phenomena, was readily explained and controlled after Dujardin-Beaumetz had shown that it was caused by anemic or toxemic blood.

There is perfect truth in the claim of the neurologists that ill health in women is frequently the cause of her uterine troubles; but it is even more true that the various diseases of the uterus and its adnexa, are the exciting cause of the ill health that frequently makes its appearance throughout her whole system.

The exact knowledge that we have of the physiological action, compels a belief that these organs form the most prominent links in the chain of woman's health of both mind and body. It is unreasonable and unscientific to style a woman neurotic, hysterical, hypochondriacal, and treat her as such, ignoring the while, local disease of her pelvic viscera, which aggravates and accentuates, and in many instances is the exciting cause of these neuroses; and apart from these direct results, there are those indirect evidences that follow upon interference with the secreting functions of the liver and kidneys, and with the metabolic action of the spleen. I reiterate that it is a blind injustice to deliberately and complacently ignore the influence of local disease as a causative agent of morbid changes in her central nervous system.

It was a strong belief in the relation of menstruation to the functional activity of the mammary epithelium, that persuaded Cheyne to remove the uterine appendages for inoperable cancer of the breast.\* That there is an intimate physiological relationship between these organs, we know, but that its influence

\*W. Watson Cheyne, *British Medical Journal*, May 7, 1898.

is sufficient to materially affect malignant growth, is exceedingly doubtful.

To the great mass of clinical evidence supporting the close relation of the brain and nervous system to the organs concerned in the genesis of the human race, additional and conclusive proof is found in the physiological development, maintenance and decline of the normal reproductive period of life.

Why, then, in the presence of a neurotic tendency, should there be a doubt as to the evil effect upon the nerve centres when pathological conditions attack these complex and delicately constructed organs, which so often give reflex evidence of their extreme sensitiveness to the action of their physiological functions and constantly show their great influence over the central nervous system? Brown-Séquard has said that the genito-urinary organs are the most closely allied to the central nervous system of any; an opinion which most of us will endorse.

Immediately preceding and during the opening of the catamenia, many women present typical symptoms of nervous exhaustion. Malaise not relieved by rest, dull headache, vertigo, alternating flashes of cold and heat due to vaso-motor weakness; palpitation due to lack of proper nerve coördination; weakened will power, often extending to hysterical outbreaks; nausea, defective vision, and sometimes diarrhœa, or temporary constipation.

Winschild has called these symptoms of nervous exhaustion *acute neurasthenia*.

In those cases, where there are gross pathological changes, as for instance in those suffering with marked displacement of the uterus, with adhesion, extensive laceration of the perineum and cervix, the latter everted, completely eroded and ulcerated, œdematous and tumified ovaries with multiple fibroid growths in the uterine walls; in the opinion deliberately formed upon a basis of wide experience of the leading operators of the world, prompt and complete operation upon the universally diseased organs, will in some cases promptly restore the patient to health and nervous equilibrium, and save her the expense and loss of time accompanying the rest treatment under the direction of the neurologist which in these cases, is vain, grotesque and reprehensible. On the other hand, picture a case of an American woman, born and reared in the midst of luxurious surroundings, who marries at an age under twenty-two, bears four or five children within a period



of six years; and following the practice and instincts of the majority of American mothers, undertakes to supervise the physical care of her children, not willing to leave them to the mercy and consideration of a hireling, particularly during the night. At about the end of this time, the majority of these mothers become physically and mentally broken. They complain of weariness, nervousness, insomnia, inability to walk any great distance, constant bearing-down feeling in the pelvis, headache, both occipital and frontal, backache, disagreeable dampness of the hands, irritable bladder, hyperæsthesia, points of tenderness in both ovarian regions, dysmenorrhœa, dyspepsia, bad dreams, constipation. With ordinary common sense, she attributes this tableau of symptoms to the strain of the rapidity of her child-bearing, and presents herself to the gynecologist. Upon examination, she has a slight tear in the cervix, slight rectocele and cystocele, relaxation of the ligamentous supports that permits of easy manipulation and displacement of the uterus. Both ovaries are sensitive to examination. This is a practical case for treatment at the hands of the neurologist. There may be those calling themselves gynecologists, who would magnify the importance of the local pelvic condition, and recommend the several plastic operations as a cure-all. But it must be said that they are not representative of the intelligence of this department.

There is no condition under which one could ever say he was operating to cure either hysteria or neurasthenia. We operate only to cure pelvic disease, but often the cure of these neuroses follows.

I will venture to say there is no class of physicians who are more methodical, systematic, or thorough in the examinations of their patients; there is no specialty in which there is a greater mass of statistical records than ours, and this comes from the almost universal habit of keeping the history book; and the market is full of innumerable varieties of them, a proof that they are demanded.

This book provides for family, personal, menstrual, marital, pain, functional, organic and nervous history, going into the history of every organ and the general circumstances, surroundings, and condition of the patient.

In an admirable paper from the pen of Dr. J. H. Ethridge,\* he

\*American Gynecological and Obstetrical Journal, February, 1898.

says, "The declaration is hereby made that in a large number of cases in which perineal laceration and the neurasthenic state exist, they may occupy the relation of cause and effect," and follows with cases in detail supporting this declaration.

In a discussion before this society last year, Dr. J. M. Duff detailed a number of cases supporting the ground taken in this paper.\*

Dr. Bantock relates a long experience in the cure of neurotic symptoms by appropriate treatment of the uterus.†

I am quite clear in my mind as to the relation of neurasthenia to many forms of pelvic disease, but not so with hysteria. This disease presents itself under such a variety of forms and with such a bewildering tableau of symptoms, that I should in any and every case hesitate in a diagnosis of cause, and qualify my prognosis as to results in every case of surgical interference. We all have seen cases with gross pelvic lesions and markedly grave hysterical symptoms dating from or after the commencement of the pelvic lesions, and which at first sight seemed the result of pelvic disease, and it is only logical to think that the removal of the evident source of irritation would correct the nervous trouble. Yet the hysterical seizures frequently persist after operation. On the other hand, there are clinical facts which repeat themselves in the writings of every prominent operator that prove that the correction of pelvic pathological conditions, has and does cure hysterical phenomena.

The hysterical state is very largely self-propagated; that is to say, when hysteria causes a yawn or a crying spell, the way is paved for the second yawn or crying spell, to take place much easier than did the first.

When the hysterical state travels in the direction of the involuntary functions, its production is more frequent, hence more damaging. Primarily, this state is always the product of a weakened or non-resisting will, and is, therefore, a pure psychosis.

Hysteria and neurasthenia are often associated together, and when so related are difficult of division; as to just how much of the symptomology is due to one or the other, is difficult to say.

\*Transactions of the American Association of Obstetricians and Gynecologists, Vol. X, p. 218.

†British Gynecological Journal, August, 1893, p. 149.



It can be said that, whereas the symptoms of neurasthenia are seen most evident in the motor system, derangement of normal functions, and general somatic, those of hysteria are more pronouncedly psychical, with emotional outbreaks and loss of will power. When this disease affects the motor system, the evidence is pronounced, as in paralysis, tremor, phantom tumors, etc. But far more common than these, are the symptoms of anæsthesia, and hyperæsthesia; the latter often seen as inframammary tenderness, and what used to be called ovarian neuralgia. My friend, Professor F. X. Dercum, has for a long time shown by ingenious bimanual palpation, that this pain in the majority of hysterics is a superficial inguinal hyperæsthesia.

The cautious care exercised by my celebrated master, Professor Charcot, in approaching every case of hysteria, has given me an exaggerated respect for this disease, and experience has taught me to be exceedingly guarded in my prognosis, as to benefit that may follow operations in its presence.

Unlike neurasthenia, no fixed morphological pathology has been discovered for this affection, and we are totally unacquainted with its etiology. We know that it has a tendency to run in families, and that it is cured by all sorts and manner of treatment.

Professor Charcot had great hopes for the usefulness of hypnotism in its treatment. We know it is most frequently met with in those of a neurotic diathesis, and in consequence, continued nerve irritation from any source is liable to start it into activity.

It is frequently seen in connection with disease of the pelvic organs, yet it often persists after the pelvic disease is cured. On the other hand, pelvic operations have often cured a patient of hysteria, but innumerable other treatments have cured it also.

Dr. S. G. Webber of Boston related a case to me of a woman bed-ridden for six years, who was suddenly cured by self-suggestion, following prayer by her minister. During her confinement she had presented many of the graver manifestations, including paralysis. No stronger evidence of a pure psychosis could be asked than this.

Let us now go to the consideration of insanity. Insanity is an abnormal condition of the mental faculties. It may be due to defective development, acquired disease, or natural decay.

Following out the ideas of Brown-Séquard, Dr. A. T. Hobbs in

a recent paper says:\* "Two theories may be offered why inflammatory disease of the uterus and its adnexa are potent etiological factors in exciting alienation in females: the reflex theory, and the internal secretion theory. The innervation of all the pelvic organs is supplied chiefly by the inferior hypogastric plexus, possibly the most important of all the nerve plexuses, controlling as it does the delicate and complex organic mechanism charged with the reproduction of the human species. The constant irritation of these lower nerve centres incidental to local disease, must react upon the higher centres, begetting in some, the delusional manifestations which determine mental alienation."

In the recent physiological theory of internal secretion, we may find the true solution of the deleterious effects that diseased sexual organs exercise upon the distant nerve centres. Some physiologists claim, "There is a normal and constant contribution of specific material by the reproductive glands to the blood or lymph and then to the whole body."† If the secretion theory is worthy of consideration, and I think it is, and those glands give off elements necessary to the economic equilibrium, it is possible that in the presence of diseased conditions, they may give off vitiated elements that act as toxines and the implantation of pathologic conditions upon these organs must in no usual degree disturb the mental equilibrium, especially in those predisposed to mental weakness.

Jacobs, of Brussels, in conversation with Laphorne Smith of Montreal, said he gave powdered cow's ovaries to his patients suffering the nervous troubles from induced menopause, and that he had cured several cases of insanity with this remedy. This is very strong evidence that the ovaries do secrete elements to the system essential to its equipoise.

Krafft-Ebing divides insanity into two great groups: disorders of the developed brain, and those due to arrest of brain development. The last comprise idiocy and cretinism, which are incurable, and therefore do not enter into this consideration of the subject. The other affections, as melancholia, mania, acute delirium, periodic insanity, moral insanity, hypochondria, hallucinations, hysteria, all belong to the developed brain.

\*American Journal of Obstetrics, August, 1898.

†American Text-Book Physiology, ed. 1896, p. 901, and Annals of Gynecology and Pediatrics, November, 1897, p. 81.

Huxley says that in all intellectual operations, we have to distinguish two sets of successive changes, one in the physical basis of consciousness, and the other in consciousness itself. As it is very necessary to keep up a clear distinction between these two processes, he says, let one be called *neurosis*, and the other *psychosis*. It is in the clear light of this definition that I make use of the word "Psychosis."

As in our consideration of hysteria as a psychosis in which the predisposition may be brought into active manifestation by a multitude of *points départs* from which must not be eliminated diseases of the pelvic organs as an exciting cause, so must these diseases be given due consideration in the etiology and treatment of various forms of insanity; and the clinical facts that are appearing from time to time following the work of the gynecologist upon the insane, are rapidly assuming the proportions of statistics which demand, and cannot fail, of careful and intelligent consideration by both the profession and the laity, the result of which will be that at no distant day, the gynecologist will be a regularly appointed officer attached to all of our asylums.

Dr. A. T. Hobbs, assistant physician to the Ontario Asylum for the Insane, in a recent paper\* states that upon examination of seven hundred and fifty females in the asylum, one-sixth of them were found to be suffering from disease of the pelvic organs.

He gives in detail the surgical treatment of thirty-two cases of general surgery, in none of whom resulted any mental improvement. He then says with reference to the gynecic cases, "The following observations apply to one hundred and ten cases comprising the number operated upon, exclusive of a number of cases too recent to be presented in this report."

It appears that those operations cover a period of over two years. Thirty-six per cent were completely restored mentally, twenty-nine per cent showed an improved mental status. In twenty-nine per cent the mental condition remained stationary, and three per cent died. He gives details of the diseased conditions and operations performed, and in analyzing the results, notes that the improved mental conditions followed the relief of a certain class of utero-ovarian disease of inflammatory origin.

In closing he says: "I must emphatically state, however, that many of those who recovered their reason, would not have done

\*American Journal of Surgery and Gynecology, Vol. XI, No. 1, p. 1.



so without surgical interference. The almost instantaneous restoration of the mental faculties in some, and the steady evolution of the normal cerebral functions in others, cannot but afford incontrovertible evidence in support of the relation of physical cause and mental effect."

Replying to a letter of inquiry, Dr. T. K. Holmes of Chatham, Ontario, writes: "My experience with nervous affections due to pelvic disorders, is gathered from private practice entirely, and embraces thirty-one cases. Twenty-eight were puerperal mania, and three were cases of melancholia.

"Fourteen of the former and three cases of melancholia have been published. A detailed account of the fourteen published could be seen in the Medical Library at Washington, and the three cases of melancholia I send you by this mail. The following will show the chief feature of all the thirty-one cases.

"One case, abscess of ovary, laceration of perineum and of cervix. Ovary removed by abdominal route, and cervix and perineum repaired. Cured of mental and physical ailments.

"One case of vaginitis. Prompt mental recovery, on vagina being cured.

"Twelve cases, lacerated cervix, with subinvolution of uterus and glairy cervical discharge. Eleven cases were cured of mania, and one improved. All restored physically.

"Fourteen cases of lacerated cervix and perineum with varying degrees of subinvolution, endometritis, menorrhagia, and leucorrhœa. Of these, thirteen were cured mentally and physically, and one committed suicide about six weeks after leaving the hospital.

"I have never known a case of puerperal mania, in which examination of the pelvic organs did not reveal some gross lesion, usually laceration of the cervix, and I am certain nearly every case will recover mentally after the lesion is cured.

"I am not a specialist but a general practitioner, and so will not be considered as viewing these cases as an enthusiast might be liable to do."

The three cases of melancholia mentioned were all caused by uterine fibroids and were restored to mental health by their removal.\*

In answer to my request, Dr. T. J. W. Burgess, Superintendent-

\*American Gynecological and Obstetrical Journal, October, 1898.

ent of the Protestant Hospital for the Insane at Montreal, has furnished me with the details of the following three cases:

CASE I.—L. M. Admitted July 26, 1890. Age 20; single. Hysterical mania of over a year's standing. Subject to epileptiform attacks, of which she was known to have as many as thirty in succession. In these she was violent, noisy and destructive.

Examined by Dr. W. Gardner, July 30, 1891, who found intense ovarian irritation on both sides and advised extirpation of ovaries.

Sent to Montreal General Hospital, October 1, 1891. Had two slight fits on November 19, and two, also slight, December 11.

June 10, 1892. Has had no fits during last six months, and was today discharged in excellent bodily and mental health.

Shortly after her discharge, she returned to England, her native land, and a letter from her, dated October 30, 1892, informed me that she had kept quite well up to that date.

CASE II.—E. H. B. Admitted December 29, 1891. Age 34. Married, three children. Attack began fourteen months before, two months after birth of last child (she had had puerperal fever after birth of second child). Became depressed and ran down physically; finally developed into a case of suicidal melancholia.

Examined by Dr. W. Gardner, January 8, 1892, who found endometritis, laceration of perineum and cervix, with probable disease of right ovary.

March 22, removed to hospital for operation, which was successfully performed, right ovary being removed and lacerations of perineum and cervix repaired. Made a good recovery after the operation and at once began to gain both mentally and bodily.

May 1, discharged recovered, and has continued well since.

CASE III.—M. A. C. Admitted June 7, 1894. Age 40. Married, seven children. Mania of over six months' duration, with strong suicidal and homicidal tendencies. Imagined she had an abnormal growth in the uterus which was sure to cause her death. Two previous attacks, one eighteen years before, which lasted a week, and another eight years before, which lasted two months.

Examined by Dr. Alloway, July 3, 1894, who found a retro-

version of uterus, slight endometritis, slight cystocele and rectocele.

Sent to Montreal General Hospital for operation July 17, 1894, which consisted of anterior and posterior colporrhaphy and repairing cervix.

Returned from hospital August 20. August 21, still talks of suicide, but does some sewing; has completely lost her idea of suffering from a tumor since operation. From this time on there was an appreciable though very slow improvement up to December 19, 1895, when she was regarded as well, both bodily and mentally, and accordingly discharged, sixteen months after operation. Has since continued quite well.

Dr. McNaughton Jones presented a paper before the British Gynecological Society, May 11, 1893, treating of uterine reflexes. The position he takes is more radical than I think most of us would endorse, and probably his opinion has been modified since then. But his paper shows that the influence of pelvic disease in the causation of aggravation of insanity is receiving widespread attention.

Dr. Robert Barns, Honorable President of the British Gynecological Society, as long ago as 1893, advocated the appointment of a special medical commission to examine all the female insane confined in public asylums, with a view of correcting any existing disease of the pelvic organs.\*

Although there are some neurologists of note, who are opposed to all gynecic theories of nervous disease, there are others of equal reputation, who consent that they are correlated.

In a discussion at the College of Physicians, Philadelphia, on "The Relation of Nervous Diseases in Women to Pelvic Diseases," Dr. Weir Mitchell said, "Insanities of various types in women occur in which the menstrual period is sometimes the original and sometimes the determinative cause of the mental disease."†

In the same discussion, he reported a case of homicidal mania, one of melancholia, and one of nymphomania at the epochs only, cured by pelvic surgery.

Dr. C. K. Mills admitted that "Neurasthenia in some instances, seems to be directly traceable to pelvic disease."

\*Transactions of the British Gynecological Society, Special Meeting, May 25, 1893.

†University Medical Magazine, Vol. LX, No. 6.



Pursuing this discussion, Dr. J. H. Lloyd said of hysteria, "It is conceivable that it might be started by a diseased ovary, or ovarian tumor, extensive cervical lesion, or lesions of the floor of the pelvis, and in these cases operative interference might favorably affect the hysterical manifestations."

Rohé out of a large asylum experience has said that he believes that many cases of insanity in women are dependent upon pelvic disease, and are cured or benefited by operations.

Dr. Wharton Sinkler believes that the removal of the ovaries for the cure of nervous disorders, leaves the majority of women in a worse condition than before, and my experience agrees with this, for to the original neuroses we have the added symptoms of the premature menopause, and these considerations have led me to be a warm advocate of conservative operations upon the ovary.\* But I think it safe to say, that the day has gone by where healthy ovaries are removed for the relief of any disorder except nymphomania.

No one will deny that frequently cases of both slight and profound nervous disturbance exist, that have no connection with pelvic lesions; and on the other hand, we claim that sometimes the worst cases of nervous disease, have their origin in the long continued and tormenting irritation of some pelvic disease, and that they disappear when the pelvic disease is cured.

Dr. Ernest Hall of Victoria, B. C., furnished me with the details of a patient suffering with suicidal mania, confined three years in an asylum, who was completely restored to mental health after the removal of cystic ovaries and diseased and adherent tubes.†

In the same letter he says the asylum authorities are about to erect a hospital ward with an operating room for the surgical care of the inmates, which is a step in the right direction, and an added evidence that these poor creatures are to be given this additional help to mental recovery.

Dr. John Young Brown in two papers presented before the Kentucky State Society, the first in 1893, and the second in 1894, gives the results of a number of operations upon the insane, with gratifying results in both the physical and mental status of the patients.

\*Annals of Gynecology and Pediatrics, November, 1897.

†The Canadian Practitioner, April, 1898.

The importance of the subject, and the wealth of recent literature bearing upon it, has led me already beyond the limits I originally intended, and much as I would like to quote at length the favorable results that have followed the work of Professor George H. Rohé, and Doctors W. P. Manton, W. Gill Wiley, Joseph Price, Greig-Smith, Routh, Baker-Brown. Their experience is published and easily obtained and supports the ground I am defending, viz.: that the removal of pathologic conditions in the pelvis, is frequently followed by the cure of the great neuroses and of insanity in the female.

As a conclusion to my argument I cannot do better than quote in extenso the report of a celebrated case which occupied the public prints at the time and which was presented by the attending physicians at a meeting of the College of Physicians, February 3, 1897, and appeared in the University Medical Magazine for March, page 419.

"The case is one of mental, or rather moral, disorder (kleptomania) in an hysterical woman, the subject of chronic uterine and rectal disease. It is of some interest from the standpoint of medical jurisprudence, as the unfortunate patient was proceeded against legally in England, and having by advice of counsel submitted a plea of guilty of larceny, received a severe sentence of imprisonment; being liberated, however, through the interference of the Home Secretary, upon the medical testimony submitted. Her husband being an American citizen of high reputation, the good offices of the American Embassy were used in her behalf, and the case at the time excited considerable attention in the public prints.

Upon Mrs. C's liberation, husband and wife sailed for home, and, before proceeding to the western city in which they reside, came to Philadelphia for the purpose of consulting Dr. L. W. Steinbach, who saw the patient for the first time on November 29, two days after she had landed from England. The next day he made a careful examination.

He found that the uterus was hypertrophied to one and a half times its normal size; the mucous membrane was irregularly roughened and bled on the slightest touch by the sound. The cervix had a bilateral laceration, more extensive on the left side. The tear was well cicatrized. The rectum was found to be fissured below, ulcerated above. There were evidences of former

ulcers that had cicatrized, and several large turgescient arterio-venous varicosities (hemorrhoids) which bled freely. Dr. Steinbach advised removal of the patient to the Polyclinic Hospital, where, after preparatory treatment for a few days, the patient was anesthetized with ether, the sphincter ani dilated, the fissures cauterized with a Paquelin thermo-cautery, the ulcers treated likewise, and the hemorrhoids clamped and cauterized.

The uterus was curetted and trachelorrhaphy performed by denudation of the cicatricial tissue and suturing with silkworm gut. The patient subsequent to the operation complained of discomfort to a greater extent than is usual with those undergoing similar treatment. The temperature remained normal throughout convalescence.

Before operation and subsequently, upon various examinations by Drs. Weir Mitchell and Solis-Cohen in consultation with Dr. Steinbach, a history was gradually obtained substantially and succinctly as follows:

The patient is 34 years of age, and has been married eleven years. She has had one child, 10 years old, and no other pregnancy. During pregnancy, she suffered much from hemorrhoids, and was operated upon, and since then has been subject to prolapse of the rectum, at times causing much distress.

Previous to fifteen months ago she had suffered little from dysmenorrhea. The menstrual flow was excessive, but otherwise normal. She had never been accustomed to rest during menstruation, although she would often faint on going into a hot room or being excited at this time. About fifteen months ago, following a wetting during menstruation, the flow ceased, and the patient was confined to bed for some days with headaches and feverish symptoms. Since then there has been no real menstrual flow; there was more or less offensive discharge at irregular times, and after two or three months a slight wetting of the diaper at what should have been the menstrual period. For some days preceding this there was considerable pain in the back and abdomen, the patient showed great nervous irritability and excitement, and the tendency to headache and to fainting became exaggerated. The patient was at times subject to palpitation of the heart.

Inquiry into the patient's mode of life, showed she had been "ever on the go," her day being one of excitement rather than mental occupation. She had always been fond of social pleasures



and of shopping, but her husband, though by no means so wealthy as report declares, has been fully able to gratify her in these respects without any necessity for her to resort to larceny.

In person, Mrs. C. is of medium height, somewhat fleshy, but of good form, the skin is fair and smooth, the muscles well developed, though somewhat flabby. The cheeks are constantly flushed, the left face is moved less than the right, this difference being easily observed; the eyes are roving and restless. In London (the husband states) she heard voices and would go to the door to listen. Later these were also heard at night. She was born with some foot trouble, walked at five years, and wore irons.

Dr. Solis-Cohen found no disease of the heart or lungs, although the second sound of the heart was somewhat accentuated, and the patient exhibited the familiar signs of vasomotor instability. Digestion was normal. Nothing pathologic was detected by either of us in the urine. At our request, Dr. D. D. Stewart also carefully examined the urine, with the result of finding it practically a typically normal fluid; the quantity which had been scanty just after the operation having increased at the time of our examination to 1,200 cubic centimetres in twenty-four hours during rest.

Concerning the offence for which the patient was prosecuted in England, it is unnecessary to enter into details further than to say that through sending to a shop to be matched, an article which had been abstracted from that very place, and to which the price mark remained attached, suspicion was aroused, and various articles, some of value, some of no value, and many for which she could have no possible use (including a toasting iron, some common towels, and plated spoons marked with the name of a hotel on the continent,) were found in the patient's trunk. She was, therefore, arrested and brought to trial, with the result stated.

The husband consulted Dr. G. H. Savage, Dr. M. L. Gabriel and Dr. W. C. Grigg, who united in the opinion that she was mentally and morally irresponsible for the offence, and that the exciting cause of her mental unbalancing, was uterine disease with aggravation from the condition of the rectum. Dr. Savage concludes his opinion by saying, "I am used to seeing cases of so-called kleptomania. They are not uncommon among people, more particularly women, belonging to the upper and middle

classes. *They are commonly met with in women who have some uterine trouble, which might lead to hysteria or allied nervous troubles.* The characteristics of the disorders are chiefly seen in the unreasonable nature of the acts, things of various value and interest being taken, and the risk of detection run being out of all proportion to the value of the goods taken. I do not think that Mrs. C. had reasonable knowledge of the acts of which she was accused, and I believe she would suffer seriously from detention in a prison or asylum. She is of the class to which kleptomaniacs belong, and one must not expect to find other signs of insanity in her."

Dr. Gabriel testified that he had seen the patient some six months previously, shortly after her arrival in England; that she was then suffering from frequent attacks of headache and irregularity and scantiness of the menstrual flow; that she was extremely neurotic, and that he had then advised rest and freedom from excitement.

Dr. Grigg's opinion was substantially the same as those quoted above. He likewise says, "I should mention that on the 3rd of November, when I last saw Mrs. C., her monthly period had commenced. This would point to the fact that, at the time she took the articles charged in the indictments, she must have been going through her monthly period, at which time her illness would be most likely to cause mental disturbance." In a letter to Dr. Steinbach, he describes the uterine conditions as follows: "The fundus is extremely tender; by conjoint examination, the cervix and body as far as one can reach, under these circumstances, very hard (a tear on the left side of the os), indicating to my mind some previous inflammation of these organs.

"The uterine sound passes four and a quarter inches, the fundus of the uterus is irregular, and in some parts rough and nodular. It is very sensitive to the touch, producing considerable pain, which continues for many hours. There is slight hemorrhage, although great care was taken in making the exploration. She has also a constant offensive discharge. She will inform you that for the last twelve months, in consequence of severe wetting during menstruation, she has had a very slight loss at these times. I saw the diapers and verify to the truth of these statements. As she could not remain in England for treatment, I have advised Mr. C. to consult you."

In his testimony submitted to the Home Secretary, he adds, "She is intensely neurotic. *The condition of things—a disease of the upper portion of the uterus—is a very common accompaniment of various forms of mania in women, such as melancholia, religious mania, nymphomania, and I have seen it in several cases of kleptomania.* It is invariably coupled with much mental disturbance. The condition I discovered is quite sufficient to account for any form of mental vagaries which are so well known to affect a certain class of women (neurotic) with disordered menstruation. Her bowel condition would aggravate this."

In explanation of the plea of guilty entered at the trial in England, Mr. C. stated, that it was by advice of counsel, as a successful defence under the plea of kleptomania would have necessitated the immediate commitment of his wife to an asylum for the insane, and the physicians whom he consulted were of the opinion that this would tend to aggravate rather than relieve her mental disorder.

The facts given above are sufficient to show the main points upon which Dr. Mitchell has based his analysis of the mental phenomena of this case, with which it is almost superfluous to state that we are in complete concurrence.

The following extracts are taken from Dr. Mitchell's opinion:

"January 20, 1897.—I have carefully examined Mrs. C., and have considered the papers which bear upon her case. I have also had a long talk with her, her husband, with the physician and surgeon who have had her in more immediate charge, and I have read the report of the English experts; also, I have had the advantage to read the newspaper cuttings, giving the details of the trial, and I have read the Home Secretary's order for her release.

"It is clear to me that Mrs. C. has, for some time, been in the habit of taking objects of no use and of little, or great value. It is known that for these thefts there was no excuse, as she has been reasonably supplied with money for a person in her condition of life.

"I do not believe that Mrs. C. had any clear notion of the nature of her acts, or of their consequence, and I am of opinion that very positive and long-neglected uterine and rectal disease had



much to do with the disorder of mind from which she has suffered, and which is apt to be associated with hysterical conditions.

"Had I been in England at the time of trial, I should not have agreed with the lawyer as to her plea. In my opinion, she should have pleaded insanity, accepted the commitment to an insane asylum for two or three months, and been released therefrom. She is now under a stigma, from which it will be difficult to escape,—that of having pleaded guilty.

"This involves long explanations; the plea of insanity would have involved none.

"I think her hysterical, weak, and unbalanced, but no criminal. It is characteristic of her form of mental disorder that she should show no other obvious signs of insanity than the overwhelming tendency which belongs to her form of monomania."

The surgical treatment of the case has already been described. The medical treatment consisted simply in rest, nourishment, and massage.

The menses appeared on December 10, and ceased four days later, reappearing in due time, and again lasting four days. The flow seemed normal in character and quantity. The patient had left the hospital on December 28, and the course of treatment above outlined, was then continued for some three weeks at the home of her sister.

On January 25, she left Philadelphia for her home, apparently perfectly recovered physically, and with these symptoms of mental improvement that, whereas when first seen, she seemed rather to enjoy the excitement of the doctors' visits and questioning, *pari passu* with her physical improvement there seemed to develop abashment, if not shame; and contrition for the acts was added to the regret for the trouble brought upon her husband, which had previously seemed to be her only cause of grief.

To the purely scientific account of this case and in explanation of our departure from usual reserve, it seems proper to add that this full and frank report of a case easy to identify has been made with the concurrence, and, indeed, at the wish of the patient's husband. Although subjected in both the secular and medical press to harsh, unmerited criticism, he has by our advice refrained, as have we, from stating to the many newspaper men who have sought interviews, the facts that amply justify him, as well as the physicians who testified to the British Home Sec-

retary concerning the patient's condition, and the friends who interested themselves in her and his behalf; and furnished a complete reply to the remarks attributed to the trial justice.

This communication, however, places the material facts upon record in a becoming manner, so that, if necessity should arise, they may be referred to for any proper purpose."

Here is a case which, because of the prominence of the English physicians who had examined and rendered an opinion in it, and because of the unusual publicity and wide-spread interest taken in it by the public, we may reasonably suppose was approached with more than ordinary care and circumspection by the prominent medical men called in Philadelphia, one of whom we recognize as a man of unusual ability, well known in the world of letters as well as a leader, if not the leading mind in his specialty of neurology. All three of the English physicians consulted will be recognized as authorities in their special departments of medicine, and they united in a sworn statement to the English Home Secretary that her mental irresponsibility was directly due to uterine disease, in which opinion the American authorities mentioned agreed.

The language used by Drs. G. H. Savage and W. C. Grigg is particularly important regarding the relation of pelvic disease to nervous and mental disorders and is based upon a wide and varied professional experience. I look upon this case and the testimony it has brought out from the medical attendants, as having the greatest value in support of the position that disease of the female generative organs, is often the direct cause of nervous and mental affections.

Since this paper was written, I have received a reprint from Dr. R. M. Bucke,\* Superintendent of the London Insane Asylum, Ontario, giving details of over one hundred cases operated upon for pelvic disease, with most encouraging results to the mental status of the patients.

Dr. Bucke is neither a surgeon nor a gynecologist, and declares that he writes from a purely scientific point of view, and that his observation compels him to believe that mental recovery in many of the cases was directly attributable to the relief of local disease by surgical intervention. As a result of his observations he says, "You will not fail to notice that these three, the ovary, the

\*American Journal of Insanity, Vol. LV, No. 1, 1898.

endometrium, and the cervix, are the most vital, are indeed the creative organs of the female sexual system, and serious disease or even functional disturbance of them always produce a profound effect upon the woman's mental state."

This paper formed the Annual Address before the American Medico-Psychological Association, at St. Louis, in May, 1898, of which he was president. In a letter which accompanied this reprint, he says, "We go on steadily with the work. Have operated in a good many cases since the date of my paper. Our success continues excellent."

Warren Chambers, 419 Boylston Street, Boston.

## THE GRAVER NERVE DISTURBANCES DUE TO ORGANIC CHANGES IN THE GENITAL ORGANS.\*

WILLIAM H. HUMISTON, M.D.

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I HAVE noticed a great disagreement and much dissension, both in the writings and discussions of the neurologist and the gynecologist when this subject (which I have chosen) has been approached. I also perceive an unusual amount of activity of late on the part of the neurologist to keep open the controversy.

I feel certain that we, as gynecologists, should not fail to make our position clear and tenable.

I am well aware that I can bring nothing new to offer you, either in the etiology or pathology, or symptomatology of these disturbances of the nervous system, which are commonly called neurasthenia and hysteria, and are described by the neurologists as fatigue and psychic neuroses.

In looking over the literature one must take care lest he hopelessly flounders in the mass of arguments, pro and con, in the defense of some pet theory, urging a particular pathologic condition

\*Read at meeting of American Association of Obstetricians and Gynecologists, Pittsburg, Pa., September 20-22, 1898.



of a particular organ as the *sine qua non* in the establishment of the etiologic factor.

Innumerable cases are reported by the gynecologist to make his peculiar position defensible—innumerable cases are reported by the neurologist to make the former's position untenable.

I do not attempt to exculpate those specialists of the past who allowed their enthusiasm to overcome their reason. I do defend those of the day who relieve the unfortunate neurotics by the removal of *diseased* pelvic organs.

I do not believe there is one member of this society who would assert that he can cure a mental *disease* or a nervous *disease* by any surgical operation, by the ablation of either a normal or a pathologic organ. I do not believe there is a gynecologist today who would attempt the cure of a mental *disease*, or a nervous *disease*, or a mental or nervous *functional disorder* by the removal of a normal healthy organ.

There is no argument in the statement that "it would be just as sensible to claim a cure by trimming the toe-nails as to claim a cure from pelvic operation." It even fails in sarcasm because of its lack of analogy and faulty logic.

I have only to remind you of the existence of the great sympathetic nervous system to show the lack of similarity.

H. C. Wood calls neurasthenia a "nervous weakness—an habitual foundation for hysteria, chorea, insanity, and various nervous diseases." Furthermore he says, "The onset is always gradual, although at times the condition appears to develop with great suddenness. Under these circumstances, however, the explosion has been preceded by a long train of more or less overlooked phenomena. Hyperesthesia and anæsthesia mark the line where simple neurasthenia passes into hysteria." Also, "Nervous exhaustion may in the beginning affect the whole of the nervous system, or it may be at first purely local and coexist with general nervous strength."

"In cases of nervous exhaustion, the efforts of the diagnostician are chiefly directed to determining the cause of the exhaustion. In a very considerable proportion of cases which have been sent to me as suffering from simple neurasthenia, chronic malaria, chronic diarrhœa, Bright's disease, or other organic affections have existed."

This quotation summarizes all that I found in the literature,

and states concisely my own opinion gathered from an experience of years of hard work in the practice of general medicine, supplemented by my labor in this special field.

Can an ocular defect bring about a general nervous exhaustion? Can a chronic malaria, a chronic diarrhœa, a Bright's disease, or any other organic affection cause neurasthenia?

Dare we question so high an authority as Dr. H. C. Wood?

And lastly, why cannot a chronic organic affection of the uterus or its appendages cause nervous weakness?

Recall the fact that not so many years ago physiologists were almost ready to believe that there must exist highly specialized nerve centres, or ganglia within the uterine muscles (as in the heart) in order to account for the rhythmic contractions of the organ during labor. Also the fact that parturition cannot be merely a reflex act because the pains have ceased through mental perturbation. There does exist one of the closest relations between these organs in the pelvis and the brain and cord.

Is it not as reasonable to suppose a chronic affection of the uterus may cause neurasthenia, as well as a chronic malaria? And can you not bring innumerable cases to bear witness to the fact?

Can we then accept the neurologist's statement that all idea of operations upon the pelvic organs must be absolutely abandoned?

What is the history obtained by the gynecologist in those patients to whom he suggests operation?

A dysmenorrhœa of long standing, and becoming more severe and less patiently borne—the nervous symptoms aggravated at each menstrual epoch, and a markedly close *synchronical* relation between the great general explosive nerve seizures and menstruation. Are such cases without a co-relation?

My experience has taught me to give with assurance a prognosis favorable to such a case following the correction of the pelvic difficulty.

Does the dermatologist refuse to use mercury and the iodides in the manifold manifestations of eruptive skin disorders due to syphilitic infection because the specific remedy fails when the eruption is not dependent upon the aforesaid infection?

Shall we abandon operative measures for the relief of functional nerve disorders when an unquestionable co-relation exists between such disorders and organic pelvic disease, because an operation has, and does, fail to cure a nerve lesion?

In the last five years of my work I have never operated upon a case in which the co-relation between the diseased pelvic organs and the nerve symptoms were not clearly defined, before an opinion from a neurologist relieved me of a doubt of a nerve or brain lesion—with one exception.

This case had been confined for a number of months in an Institution for the Insane. She was thirty-two years of age, had given birth to two children, and well up to the time of the birth of the second child. She left her bed after this second labor before the end of a week, and cared for her household. Shortly she began to be morose and melancholy, and at times violent—attempting to destroy not only her own life, but her two children also. Her general health was good, but on examining the pelvic organs I found the cervix at the *introitus vaginae* lacerated and cystic—the uterus very large and retroverted, with prolapse, enlarged, and tender ovaries.

I had her removed to my private hospital. After the usual preparation I curetted the uterus, repaired the laceration, and supported the uterus with a pessary.

She showed evident signs of improvement within a very short time, and on the second day following the operation said that the sense of pressure and peculiar feeling she had had in the occipital region had disappeared.\* One year and a half afterward we learned that she was in perfect health—bodily and mentally—and had increased forty-five pounds in weight.

CASE II.—*Melancholia*.—Mrs. B. was approaching the menopause. She was troubled with all the symptoms accompanying endometritis, with retroflexion of the uterus. Upon close questioning and examination by a neurologist, no evidence could be obtained to attribute the deep melancholic condition into which she had gradually fallen.

The correction of the local condition shortly restored her to her normal plane.

CASE III.—*Neurasthenia*.—Miss S. was cared for in Philadelphia by an eminent neurologist for simple neurasthenia. Every known art was tried to relieve her condition. After a number of months of fruitless work an obstetrician and gynecologist of that city was asked to see the case. He advised against *any* operative interference.

Six months afterwards she came to my hospital. I found an



enlarged, sharply retroflexed uterus, but no disease of the appendages. The uterus was curetted and held in the normal position by a pessary. She quickly responded to the treatment, and declared herself unusually well in a short time. She has remained under my observation during the past three years, and I know that she is perfectly well.

CASE IV.—*Insanity*.—Miss H., aged 20, gave history of severe dysmenorrhœa for the last four years. For eight months prior to the time I was called to see her she had been kept under close surveillance because of several attempts at suicide having been made. Upon examination I found an enlarged retroverted uterus, and prolapsed sclero-cystic ovaries three times the normal size. I curetted the uterus, removed the diseased appendages and suspended the uterus. Her recovery was rapid and complete.

CASE V.—*Hystero-epilepsy*.—Miss G. first menstruated at the age of fourteen. Two years later was injured by falling from a horse. Her next menstruation was accompanied by severe pain. This increased month by month until she became a nervous wreck.

There developed in this case one of the most severe forms of hystero-epilepsy I have ever seen. She was under the care of several neurologists, and in several private sanitariums for a number of years, but was finally turned over to my care.

The examination showed a retro-displaced and adherent uterus with the appendages imbedded in a large inflammatory exudate. I removed the appendages and suspended the uterus.

Her improvement was very marked after the first two weeks. She gained from 70 to 112 pounds in a few months, and is now the picture of perfect health.

CASE VI.—*Hysteria*.—B. L., aged 18, had first menstruated at the age of 14—each period being accompanied by severe and prolonged pain. When 17 years old she began to show evidences of neurasthenia, which general treatment could not remedy. This condition rapidly developed into one of the major forms of hysteria.

I examined under anæsthesia, and found a sharply anteflexed retroverted uterus. The cervical canal was enlarged and filled with a purulent discharge, and a large surface of the cervix was eroded, and the vaults of the vagina denuded. Both ovaries were palpable, but the left was a little enlarged and rounded.

I curetted the uterus and kept it well forward by tamponading the vagina with gauze.

She steadily improved in her physical and mental condition, and was dismissed in two months. She gained thirty pounds in an incredibly short time, and had no recurrence of the hysterical seizures, but she was still a neurasthenic. She returned to me a year afterward. I found the uterus in good condition, but the ovary appreciably larger. I advised its removal. The family would not consent.

It is nearly three years now since I first saw her. She still has painful menstruations, and is still a neurasthenic.

This case aptly shows the natural development of hysteria, based upon neurasthenia. With the relief of the acute inflammatory action the hysterical symptoms disappeared, but the slowly progressing chronic ovaritis prevents the patient from gaining her normal nervous tone.

I could multiply these cases many times from my records, but I have already said enough to warrant my proposing that we make some effort to secure for the women confined in our country and state institutions for the insane, such surgical measures which will, I know, in quite a proportion, be a curative means for their mental ailment, and which must in a vastly greater proportion at least improve their condition, both mentally and physically.

122 Euclid Avenue, Cleveland, Ohio.

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DISCUSSION OF PAPERS BY B. SHERWOOD-DUNN, M.D., AND  
WILLIAM H. HUMISTON, M.D.

DR. W. E. B. DAVIS, of Birmingham, Ala.: Mr. President.— I think that this country which has been foremost in many good things, and particularly the Southern part of it, was also the cause of much harm in the enthusiasm of surgical procedures for the relief of nervous troubles. You will remember the late Dr. Batty, who was unquestionably the father of pelvic surgery. He did all of his operations without any knowledge or conception of the pathological condition to be relieved. In other words, he operated for symptoms. He repeatedly stated that he removed the ovaries in cases in which he felt he could not relieve by other treatment. The operation was frequently done in cases where there was no apparent disease with bad results, consequently the

neurologists became prejudiced against surgical procedures for the relief of pelvic trouble. No doubt the teachings of Dr. Batty have led largely to the prejudice that is manifested now by neurologists. Of course, Dr. Batty and his followers were misled in many cases. We know how hysterical women may sometimes be operated upon and be relieved, it makes no difference what the operation may be. An operation on this class of patients seems to relieve for a time, whether anything is accomplished physically or not. In our State, Dr. Batty operated on a number of cases at the Institution for the Insane. In some of them he operated without any conception of the pathological conditions, and not for the relief of pathological trouble, and this point has been lost sight of by neurologists. Yet I believe there are a few cases in which great good has been done by Dr. Batty where no pathological trouble was found. As gynecologists, we know that we accomplish the most good in those nervous cases where we find marked pathological conditions. The more disease we are compelled to remove, the sooner the patient gets well, and the less the disease and the greater amount of nervous trouble, the slower is the case to recover. Neurologists expect too much in old cases of pelvic trouble that have progressed perhaps for fifteen or twenty years. Of course, if these patients do not get relief at once, the operation is put down as a failure. We might just as well expect a man who has had financial reverses, or who has been losing a large fortune for fifteen years, to have his nervous system restored by the restoration of his money. We know the nervous system does not recover so quickly. Unquestionably in cases where we find marked neuroses, they are instances in which the women have a predisposition to nervous and mental troubles, as has been pointed out by the neurologist, and no doubt he is right about it. Diseased pelvic organs should be removed because they have such a marked effect upon both the mind and nervous system.

DR. LEWIS S. McMurtry, of Louisville, Ky.—There is no subject that can come before the profession that needs as thorough a ventilation and as clear an understanding as this. There is a great misunderstanding existing between the gynecologists and the neurologists about these matters, and there is a total lack of uniformity among gynecologists as to the relations that exist.



and as to what can be obtained by surgery in the treatment of neuroses in women. We do not doubt the observations that one another make when they are brought here, but we must discuss the conclusions that are drawn from certain observations. We will have reports of cases made to us of where a woman has melancholia, such as Dr. Humiston reported this morning, in which after an endometritis is relieved and a displaced uterus corrected a cure is effected. Now, I do not doubt the accuracy of Dr. Humiston's observations in regard to these cases, but I do doubt very much the conclusions that he draws from such a case. Let me illustrate what I mean. We may have a woman with endometritis and slight displacement of the uterus, and a little cystic or slightly prolapsed ovary. Those symptoms we frequently see in women. We may find those conditions in a large number of women who may not complain about their pelvic organs, who have never requested that they be treated, and yet upon investigation we will find those conditions. Take a case of that kind, have her taken to a private hospital, as Dr. Humiston did one of his patients, and treat her with the utmost kindness and gentleness, and give her the services of a skilled physician who commands respect and confidence, take her from home, from the conflicts that sometimes take place between brothers and sisters, parents and sisters, or between a wife and a brutal husband, and make the woman feel that she has something to live for, and she will begin to improve. If, along with this, the endometritis be relieved, and the slightly displaced uterus be corrected, a cure will doubtless be effected. There is a large scope here for errors in conclusions. I have had my full share of dealing with this class of cases, and the very able exposition of the subject by Drs. Dunn and Humiston, and the remarks of Dr. Davis, are all in the right direction. The pelvic organs of women are connected through the nervous system with the nerve centres in such a way as to exert a very potent influence on the disorders of the nervous system. I think neurologists are coming to the conclusion very rapidly that when we have an obscure neurosis in a woman, the pelvic organs should be examined just like the eyes are examined, and if there is a focus of irritation found, it should be corrected just as much so as eye strain should be corrected. If there is any lesion that needs attention, it should receive it. All of our insane asylums have a large number of

women in them who might recover but for the little straw that breaks the camel's back all the time; that is to say, they are in a condition to get well, provided they are relieved of sources of irritation, namely, some trouble with the pelvic organs that is constantly irritating the nervous system. We can say the same thing with reference to fissure of the anus. It is a constant source of reflex disturbance from a peripheral focus; yet it is a very different thing from coming down to general statements that operations upon the pelvic organs will cure insanity and other severe and formidable neurotic diseases. I think much discredit has been cast upon gynecology by ablation of the uterine appendages, because at the menstrual period on account of dysmenorrhea neurotic disturbances are aggravated. By ablation of the uterine appendages we precipitate all of the explosive neurotic effects of the menopause upon a woman in this exquisitely sensitive nervous condition, and it has been a great discredit to our art. You will find a number of these cases in almost every community, and I take occasion to remark here that *specialists are not the ones that are doing this work. It is the general surgeon.* Doubtless ablation of the appendages is done for a neurosis that has nothing more to do with the pelvic organs than it has with the eyes, or any functional disturbance of the organism, hence the point we come to in the papers of Drs. Dunn and Humiston leads us in the right direction, namely, that we should operate for lesions only. It requires great discretion in the selection of appropriate cases to be treated. It is really painful to me to have come into my office one of these cases that I can recognize in a few minutes. Functional neuroses in the lower class of people are very common. The physician who assumes such cases has great responsibility, as well as an enormous amount of labor in inaugurating a system of education to get patients out of this condition. It is necessary to have nurses who are companionable for these women and capable of making life worth living, creating a healthy atmosphere, inspiring them with healthy ideas about life, and doing everything to build such women up together with other remedial measures. A great many of these cases are not suitable for surgery, and whenever surgery is resorted to, in cases where there is only a slight departure from the normal condition, such as endometritis and menstrual disorders, which may be the cause of the nervous disorder, it is a mistake.

DR. CHARLES A. L. REED, of Cincinnati.—Inasmuch as I have been identified with this branch of our scientific polemics, I feel that I want to say something on the excellent paper that has been prepared and presented in such a scholarly manner by Dr. Dunn. I trust that Dr. Dunn will experience more pleasant results from the publication of this contribution than did I, when some nine or ten years ago I reviewed this subject in somewhat direct terms in an address before the Erie County Medical Society of Buffalo. I do not recall a contribution that seemed to excite so much animosity on behalf of asylum superintendents, and from whom there emanated a general chorus of protests and abuse. From comparatively few quarters did I receive words of encouragement and of commendation; but shortly after that one of our distinguished colleagues took charge of an asylum and, recognizing the truth of what I had said, he exemplified it in a conclusive manner in the work of the institution over which he presided. I allude to Dr. George H. Rohé, then in charge of the Maryland Hospital for the Insane. If anything were needed to make the case conclusive, that deficiency has been supplied by the essayist this morning and supplemented in turn by my distinguished friend and neighbor, Dr. Humiston of Cleveland. The conviction that there is an etiologic relationship between organic disease within the pelvis and general functional neurotic disturbances is laid in the deepest possible appreciation of the truth in both physiology and pathology. Nothing is more conclusively demonstrated today, and it were useless in this presence and at this juncture to trace the morbid influences as they traverse the nervous system from the central telegraphic office to the remotest nooks and crannies of the system. It were simply futile to trace these influences at this juncture of the discussion. Let each of us go from this Assembly Hall imbued with the conviction that duty calls us in this direction and not cease the contest until results are realized, and in every institution used for the incarceration of the insane let us see that there shall be that intelligent administration of the necessities of those unfortunates that shall result in their greatest welfare.

DR. JOHN M. DUFF, of Pittsburg.—This is a very important subject. Dr. Reed several years ago brought up the subject before one of the Ohio Medical Societies. Dr. Rohé's work demon-



strated the possibilities in the direction in which he was working, and which Dr. Reed had previously spoken of. In 1893, in my address before the Section of Obstetrics and Diseases of Women of the American Medical Association, I referred to the possibilities in this direction in connection with our insane asylums. But there needs to be great care exercised when we utter words such as those that have been uttered by Dr. Reed with reference to the work in our insane asylums. As I said last year in regard to Dr. Dunn's remarks, I believed his statements were very accurate and scientific, but in at least half a dozen cases that have come under my observation this year I have been refused operation, because Dr. Dunn was understood to say that a woman could not have her ovaries removed without affecting her mental condition. This is dangerous ground to tread upon, and we must consider it carefully before we endeavor to influence those in charge of our asylums that there shall be a wholesale castration of inmates for the relief of mental disturbance. Just how we are going to do this work in a proper manner is very difficult to understand. When we, as an Association, say that our asylums should be entered, we should explicitly state that they should only be entered by men who are adepts in diagnosis, prognosis, and operative measures. If we open the gates and allow every man who thinks he can remove an ovary to do so, we will have very disastrous results. We see this in practice daily outside of the asylums.

I expected to have had a woman here this morning upon whom I operated about eleven months ago. She was brought from an insane asylum. Her family came to the conclusion that they would bring her home and try to care for her. She had suicidal mania at the time she was brought to my office, so that it took three persons to bring her to the office. On examination I found the uterus retroverted, an ovary enlarged. I removed her ovary and fixed her uterus. This woman went home at the end of four weeks, took charge of the house, her sisters being employed in stores in the city, and she has been keeping house for them ever since. For months she has come to my office regularly once or twice a month, and she expresses herself as being in the best of health, and appeared before the class at the College.

DR. D. TODD GILLIAM, of Columbus.—I think we have struck the right chord in this meeting with reference to the relationship

existing between neurology and gynecology. The craze has gone over the country, having started with Batty's operation, and every gynecologist has operated on the pelvic organs for neurotic states, and not only that, some of them promise the patients and their friends that if they remove this or that lesion the patient will be well. This state of affairs does not exist today among the conscientious, the more intelligent and advanced gynecologists. The tenor of the papers today has been of the right order. Dr. Dunn's paper is a magnificent production, one we shall revert to frequently when this subject comes up. It is a scholarly contribution, and I cannot compliment him too much on the labor he has expended upon it.

While Dr. Humiston's paper was conservative, I think he drew deductions from the cases reported with which we cannot entirely agree. We want to place ourselves on record to the effect that the pelvic organs are very important; that there is probably no other set of organs in the system that have so much influence on the nervous system or upon the brain centre as the pelvic organs. This is manifested in slight departures from physiological conditions of the pelvic organs. You will find women who have mental and nervous perturbations at the time of menstruation, showing that there is an intimate relationship existing between these two. Women become irritable during the menstrual period, and this irritability or depression of mind may lead to insanity or to melancholia, so that no one can doubt that there is this relationship. Why should we eschew it in making up the factors of trouble? When a patient comes to me with a confirmed neurosis and a pelvic lesion, I do not promise to cure her of the nervous trouble. Happily in a certain number of cases a cure follows sometimes immediately, sometimes after a considerable interval. But I promise to do the best I can to remove the lesion. I do what I can to help to relieve her physical trouble. If there is something the matter with the eyes, I send her to an oculist; if she has any trouble with the intestinal canal, an effort is made to relieve it. The gynecologist should do his part, and wherever a pathological condition exists, it should be corrected.

DR. J. HENRY CARSTENS, of Detroit.—Dr. Gilliam has struck the keynote. We fail to see that there is any trouble of the

alimentary canal. We fail to see that there is something the matter with the kidneys, which produces a great many more nervous symptoms than we are aware of. We overlook these things, we neglect them, we operate, and the result is failure, and discredit is cast upon gynecology. In all nervous diseases, be very careful about operations. Do not promise patients too much. Have them under the closest observation; look them over carefully from head to toe, over and over again. You may remove a diseased ovary, or correct a displaced uterus, and yet there is something back of this. If you are wise, look at everything, otherwise you will get yourself into trouble all the time.

DR. SHERWOOD-DUNN (closing the discussion on his part).—Dr. Carstens, in his remarks, has dissected the cause of the deprecatory attitude taken by neurologists respecting our practice. We ourselves are entirely to blame for the position that this department of medicine now shows toward us, which heretofore has gone hand in hand with us. Never make a diagnosis until you have examined a patient from the hair of his head to the soles of his feet. This is the universal teaching of those who have been educated in Europe, that diagnoses must be made in a thorough manner. For this purpose they give us books with appropriate headings, and I have brought to this country a book that was furnished me in my gynecological service in Paris, from which I have had duplicates made in English. It starts off with the family history, the personal history of the patient, menstrual history, marital history, accidents due to parturition or other causes, pain, discharge, heart, lungs, appetite, digestion, kidneys, bladder, bowels, nervous system, and last, the most important of all, the general condition of the patient as she appears to you when she comes to your office, or what your impressions about her are.

Dr. Davis spoke of the initiation of this much-to-be depreciated practice of operating upon healthy organs for neurotic conditions. A greater mistake was never made in surgery. There is no doubt about it. Because of it, neurologists are now declaiming against the influence of any operation in the presence of any character of pathological lesion as having absolutely no influence whatever upon the nervous system. Dr. Gilliam in his remarks, mentioned the possibility of our being led into error in promising post-operative results. The last case I examined in



my office the Saturday before starting for this meeting, was a fine, well-nourished, handsome, squarely-built lady of forty years of age, at the head of one of the largest millinery establishments in Boston. She is a woman who manages some twenty or thirty girls. She has built up a business from small beginnings. She is a woman of extraordinary self-poise, self-possession and great ability. She came into my office with her husband, desiring relief from periodical hysterical attacks at the catamenia. I took her history carefully, made an examination, and in making the examination she cautioned me to be careful not to hurt her. She told me that she was exceedingly sensitive of any manipulation of the sexual organs. I introduced my finger lightly into the vault of the vagina and found the left iliac fossa almost completely filled with a fibroid. The moment I touched it she shrank, her muscles contracted, and I asked her if it gave her much pain. She replied, "It does not pain me, but it sends a shock all over me." She said, "If you did that several times, I would have one of my seizures." Feeling that the territory was too tender, I made a rectal examination, passed my finger lightly up under the tumor as delicately as I could, and when I reached the region of the ovary she had an hysterical seizure, and it was only with the aid of the nurse that we kept her on the table. This woman has a pathological condition of which she is to be relieved. Can I promise that the relief of that condition will cure her hysteria? I certainly cannot. I do not know anything about what the post-operative result will be upon that woman's nervous system in the presence of those pathological conditions. It is self-evident that the existing pathology in her pelvis is the exciting cause of her neurosis, but has that neurosis been sufficiently long established to have become a permanent factor in her system? Will the relief of the pathological condition cure the hysteria? It may, and from the fact that she had an hysterical attack from a most careful examination, would lead us to promise ourselves that when the source of irritation is relieved, she will gradually come back to her nervous balance. Nevertheless, as much as I was tempted to tell this patient that in my judgment the removal of the inflamed adherent fibroid would restore her to proper mental condition, I knew by long experience it was absolutely out of the question and improper for me to do so. I told her she would have hysteria as long as the fibroid was there, but I could not promise to re-

lieve the hysteria by removing the tumor. If we will take a position of that character, the odium that is attached to operative procedures in the presence of psychotic and neurotic conditions will be lifted from our branch of the profession, and we will return to an even field with our neurological brothers and stand upon the same ground.

DR. HUMISTON (closing the discussion).—In answer to Dr. McMurtry, I will say that my paper dealt with the graver forms of nervous disturbances, due to organic pelvic disease. The burden of his talk was upon slight uterine displacements, slight prolapse, which I do not think is applicable to the statements that I have made. I could have reported in my paper today, cases that have occurred in my practice during the last year and a half, but the cases I have detailed antedate that time and have been well during this long interval. That is why I have reported them. In regard to the case he speaks of that was removed to my hospital with pleasant surroundings, taking her out of the asylum, etc., this being an important factor in the cure of the case, I will say that this woman was absolutely despondent. She believed she had lost her soul. She made the remark that "the devil came one morning and split open my skull and removed my soul." She said I could do what I cared to do, but that I would waste my time. This woman made a brilliant recovery after operative interference.

Dr. Dunn has spoken with reference to thorough examination as a necessary preliminary to all of these cases. The gynecologist who immediately investigates the pelvic region without giving attention to the head, the chest, the abdomen and general nervous system, is going to make mistakes frequently. I find many conditions by carefully investigating these cases—a dilated stomach, nephritis, autointoxication, etc. I take the case in its entirety, and when I have corrected those conditions and still have a pathological condition within the pelvis, I offer the patient a strong hope that she will entirely recover from a proper surgical procedure.

